

AMENDMENT TO THE CLAIMS

Listing of Claims:

Claim 1 (Currently Amended): A hydrodynamic bearing system, comprising:

a shaft;

a bearing sleeve, said bearing sleeve having an inner cylindrical bore and said shaft being inserted into said inner cylindrical bore;

a bearing gap formed between said shaft and said bearing sleeve, said bearing gap being filled with a lubricating oil; and

a shield enclosing said bearing sleeve,

wherein said shield is secured to an end surface of said bearing sleeve

having a recessed portion between its outer cylindrical surface and its inner cylindrical surface closest to said outer cylindrical surface, said recessed portion being located at a position on said end surface that is distanced from said bearing gap, and wherein said inner cylindrical surface creates a wall between said recessed portion and said bearing gap, said wall precluding lubricating oil from making contact with said shield. ~~shield does not contact said lubricating oil.~~

Claim 2 (Original): The hydrodynamic bearing system according to Claim 1 further comprising

at least one bearing element mounted on said shaft, wherein said bearing gap is formed between said bearing sleeve and said bearing element.

Claim 3 (Original): The hydrodynamic bearing system according to Claim 1 further comprising

a lubricating oil reservoir, wherein said shield is secured to said end surface of said bearing sleeve at a position that is distanced from said lubricating oil reservoir.

Claim 4 (Canceled)

Claim 5 (Original): The hydrodynamic bearing system according to Claim 1, further comprising a temperature barrier groove.

Claim 6 (Original): The hydrodynamic bearing system according to Claim 1, wherein said shield is secured to said bearing sleeve by laser welding.

Claim 7 (Currently Amended): A spindle motor having a hydrodynamic bearing system, said hydrodynamic bearing system comprising:

a shaft;

a bearing sleeve, said bearing sleeve having an inner cylindrical bore and said shaft being inserted into said inner cylindrical bore;

a bearing gap formed between said shaft and said bearing sleeve, said bearing gap being filled with a lubricating oil; and

a shield enclosing said bearing sleeve,

wherein said shield is secured to an end surface of said bearing sleeve

having a recessed portion between its outer cylindrical surface and its inner cylindrical surface closest to said outer cylindrical surface, said recessed portion being located at a position on said end surface that is distanced from said bearing gap, and wherein said inner cylindrical surface creates a wall between said recessed portion and said bearing gap, said wall precluding lubricating oil from making contact with said shield.
~~shield does not contact said lubricating oil.~~

Claim 8 (Original): The spindle motor according to Claim 7 further comprising at least one bearing element mounted on said shaft, wherein said bearing gap is formed between said bearing sleeve and said bearing element.

Claim 9 (Original): The spindle motor according to Claim 7 further comprising a lubricating oil reservoir, wherein said shield is secured to said end surface of said bearing sleeve at a position that is distanced from said lubricating oil reservoir.

Claim 10 (Canceled)

Claim 11 (Original): The spindle motor according to Claim 7, further comprising a temperature barrier groove.

Claim 12 (Original): The spindle motor according to Claim 7, wherein said shield is secured to said bearing sleeve by laser welding.

Claim 13 (Withdrawn): A method of manufacturing a hydrodynamic bearing system,

comprising the steps of:

mounting a bearing element onto a shaft;

inserting said shaft with said bearing element into a bearing sleeve;

filling a bearing gap with lubricating oil while observing the fill level of
said lubricating oil;

placing a shield onto said bearing sleeve such that said shield does not
contact said lubricating oil; and

welding said shield to said sleeve.